

NOAA's Coastal Assessment and Data Synthesis System

Census of Agriculture (1978-1992)

Dataset Description

The Census of Agriculture dataset provides 1978, 1982, 1987, and 1992 information on agricultural production in the United States. These files have been geo-referenced to the Coastal Assessment Framework (CAF).

The data are available for four distinct spatial aggregations as outlined below. To view the data dictionary of each dataset, click on the links below or refer to NOAA's Coastal Assessment and Data Synthesis System (<http://coastalgeospatial.nos.noaa.gov>).

- 1) Coastal Watersheds (from NOAA's Coastal Assessment Framework),
- 2) Hydrologic Cataloging Units (8-digit sub-watersheds from the U.S. Geological Survey and a building block of NOAA's CAF),
- 3) Counties, and
- 4) States (aggregated from Counties).

Source(s) of Information

The Bureau of the Census provided 1978, 1982, 1987, and 1992 census of agriculture information on CDROM(s). US Bureau of the Census, Economics and Statistics Administration, Washington, DC 20233. For more information about the files, contact Data User Services Division at 301-763-4100. For information concerning the technical documentation contact Data User Services Division at 301-763-2074. For information concerning the subject matter of the files, contact Douglas Miller or Quentin Coleman at 301-763-8561.

Data Processing

History. The first agricultural census was taken in 1840 as part of the sixth decennial census of population. Until 1950, an agricultural census was taken every ten years as part of the decennial census, in addition to the years 1925, 1935 and 1945 when a separate mid-decade census of agriculture was taken. Between 1954 and 1974, a census of agriculture was taken on a five-year cycle for years ending in 4 or 9. In 1976, Congress authorized a census of agriculture to be taken for 1978 and 1982 in order to coincide with the census covering manufacturing, mining, construction, retail trade, wholesale trade, service industries, and selected transportation activities. The adjustment in 1976 established the agricultural census on a five-year cycle for years ending in 2 or 7.

The census of agriculture is the leading source of statistical information about agricultural production in the United States and the most consistent source of data at the county level. According to the census, a farm represents any place that sold at least \$1,000 worth of agricultural products during the year. Inventories of livestock and poultry represent stock as of December 31. Crop and livestock production, sales and expenses represent figures for the calendar year with exception of a few crops such as citrus. Dollar figures for expenses and agricultural product sales are in current dollars and have not been adjusted for inflation or deflation.

Selected variables about agricultural production for years 1978, 1982, 1987 and 1992 at the county level were assigned watershed attributes through a GIS (Geographic Information System) overlay procedure

using NOAA's Coastal Assessment Framework (CAF). Prorated data were summarized by NOAA's Unique Code, HUC, and watershed boundary (EDA, CDA and FDA).

1) Variables retrieved from the Census of Agriculture 1987-1992 CD-ROMs

<u>ANIMALS</u>	<u>ITEM (1978)</u>	<u>ITEM (1982-1992)</u>
beef cows	11020	140020
milk cows	11036	140036
heifers-calv	11052	140052
cows & heifer	11018	140018
steers-calv	11054	140068
hogs-pigs	12002	150002
sheep & lambs	13002	170002
horses	13018	180002
poultry	14003	160003
hens & pullets	14005	160005
pullets>=3mo	14016	160016
pullet chicks	14018	160018
broilers	14020	160020
turkeys	14022	160022
turkey-hens	14024	160024
<u>CROPLAND</u>	<u>ITEM (1978)</u>	<u>ITEM (1982-1992)</u>
total cropland (farms)	01013	010013
total cropland (acres)	01014	010014
harvested cropland (farms)	01015	010015
harvested cropland (acres)	01016	010016
irrigated land (farms)	01017	010017
irrigated land (acres)	01018	010018
<u>OTHER</u>	<u>ITEM (1978)</u>	<u>ITEM (1982-1992)</u>
farms (number)	01001	010001
land in farms (acres)	01002	010002
avg. size of farm (acres)	01003	010003
market value of ag. prod. sold (\$1000)	01019	010019
total farm production expenses (\$1000)	01035	010030
net cash return (\$1000)	04002	040002
net cash return-avg. per farm (dollars)	04003	040003

2) Estimation Method Used To Compute Nutrient (nitrogen and/or phosphorus) Content of Manure

a) Total number of animals are:

total = beef cows + milk cows + heifers + steers bulls & calves + hogs and pigs + sheep and lambs + horses
+ poultry + pullets + broilers + turkeys + turkey hens

b) Calculations of manure nutrient content in units of kilograms per year were based on an estimate of the nutrient content of daily waste produced per 1,000 lbs of animal weight. The following estimates of nutrient content were obtained from a publication of the Soil Conservation Service, April 1992, Agricultural Waste Management Field Handbook, Chapter 4:

<u>ANIMAL</u>	<u>WEIGHT(lb)</u>	<u>Nutrient Content (lb/day/1000lb)</u>	
		<u>Nitrogen</u>	<u>Phosphorus</u>
beef cows	800	0.315	0.105
milk cows	1200	0.400	0.060
heifers-calf	600	0.310	0.040
steers-calf	800	0.315	0.105
hogs-pigs	425	0.280	0.150
sheep & lambs	175	0.450	0.070
horses	600	0.280	0.050
poultry	3	0.830	0.310
hens & pullets	2	0.620	0.240
broilers	3	1.100	0.340
turkeys	3	0.740	0.280
turkey-hens	3	0.740	0.280

c) Format of computation is:

$$\text{nutrient (kg)} = (\# \text{ animals from ag. census}) * (\text{average weight}/1,000 \text{ lbs}) * (\text{nutrient content in lbs/day}/1,000 \text{ lbs}) * (365 \text{ days}) * (0.4536 \text{ kg/lbs})$$

Contact(s) for Data Processing:

For expert assistance with the data processing techniques used in developing this data, please contact:

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Quality Control

County-level Census of Agriculture data were recomputed using a file listing the prorated values (agcensus data in unique/county area). Computed county level data were then compared with original county datasets. The comparison confirmed the accuracy of the areal proration method.

Citation:

Eutrophication. Coastal Assessment and Data Synthesis (CA&DS) System, 1999. National Coastal Assessments (NCA) Branch, Special Projects Office (SP), National Ocean Service (NOS) , National Oceanic and Atmospheric Administration (NOAA) . Silver Spring, Maryland.

Applicable Digital Geography

The data are associated to distinct spatial aggregations. Geographic Information System (GIS) digital geographies are available for associating these data to their appropriate spatial aggregations. The following GIS files apply to and should be used with these data during GIS processing.

Coastal Watersheds
Hydrologic Cataloging Units
Counties
States

To download the data or an applicable digital geography, visit:
http://coastalgeospatial.nos.noaa.gov/data_gis.html.

For Additional Information:

For additional information, refer to NOAA's Coastal Assessment and Data Synthesis (CA&DS) System, or contact:

The CA&DS team.
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